

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 7-8, 2017

Prepared on November 13, 2017

ITEM NUMBER: 6

SUBJECT: Revision of Waste Discharge Requirements, Reissuance of National Pollutant Discharge Elimination System Permit No. CA0047881 for Morro Bay and Cayucos Wastewater Treatment Plant, San Luis Obispo County, Order No. R3-2017-0050

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KEY INFORMATION

Location: 160 Atascadero Road, Morro Bay, CA 93442
Place ID: 241479
Type of Discharge: Disinfected secondary-treated municipal wastewater
Permitted Flow: 2.36 million gallons per day (MGD)
Type of Treatment: Screening/grit removal, biofilters, solids-contact chamber, secondary clarification. Existing plant has 301(h) waiver for bypassing secondary treatment for portion of flows greater than 1 MGD.
Disposal Method: Discharge to Pacific Ocean
Solid Wastes: Secondary digested, dried on-site in concrete beds, then hauled offsite for composting and eventual use as soil amendment
Existing Orders: Waste Discharge Requirements Order No. R3-2008-0065 and General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-003-DWQ).

This Action: Adopt Order No. R3-2017-0050

SUMMARY

This agenda item considers the reissuance of an existing NPDES permit. The Fact Sheet, Attachment F of the proposed Order, includes the legal requirements and technical rationale that serve as the basis for the requirements of the permit. Water Board staff recommends adoption of the proposed Order.

DISCUSSION

The City of Morro Bay and the Cayucos Sanitary District (Discharger) own and operate a wastewater treatment plant that provides sewerage service to the communities of the City of Morro Bay and Cayucos Sanitary District, serving approximately 12,835 people. All wastewater goes through primary treatment, including screening, grit removal, and primary sedimentation. A portion of the flow is diverted for secondary treatment process using biofilters, a solids-contact chamber, and a secondary clarifier. The secondary process also includes parallel single-stage,

high-rate, trickling filters whose combined outflow goes to a solids contact channel and finally on to a secondary sedimentation tank. When flows exceed 1 MGD, secondary-treated effluent can be blended with primary treated effluent, and the blend is chlorinated and dechlorinated before discharge. This partial treatment of wastewater was granted a Clean Water Act section 301(h) waiver from meeting full secondary treatment standards in 1985 by the United States Environmental Agency (U.S. EPA). The Fact Sheet of the proposed Order (Attachment F) provides a detailed regulatory history of that waiver and the associated 2008 Settlement Agreement between the Water Board and Discharger to upgrade to full secondary treatment.

The proposed Order includes full secondary treatment limits for the Facility. However, the Discharger will not be able to meet full secondary treatment limits at the time the proposed Order would become effective. As a result of force majeure delays, there has been significant changes to the expected milestones contained in the 2008 Settlement Agreement, and Water Board staff will be developing a time schedule order to bring the Facility into compliance with the proposed Order.

RECENT UPDATES

In preparation for this agenda item, Water Board staff requested an update from the City of Morro Bay regarding the planned Facility upgrades. The following is from their comment letter dated November 6, 2017:

Following denial by the California Coastal Commission of the Coastal Development Permit (CDP) for construction to upgrade the wastewater treatment plant at its existing location in 2013, the City of Morro Bay began planning a new Water Reclamation Facility (WRF). Between 2013 and 2016, the City performed several constraints and siting studies. In June of 2016, City Council directed staff to move forward with planning and permitting at the South Bay Boulevard site as the preferred site for the WRF Project.

Since June 2016, the City has completed the following major project elements:

- Notice of Preparation of an Environmental Impact Report*
- Biological and cultural resource surveys in support of California Environmental Quality Act (CEQA)*
- Draft Water Reclamation Facility Master Plan*
- Hydrogeological modeling and reports to evaluate reuse options, ultimately focusing on feasibility of indirect potable reuse (IPR) in Morro Valley Groundwater Basin*
- Draft Water Recycling Facilities Plan (Currently titled Master Water Reclamation Plan)*
- Draft Rate Study*

After completion of the initial Draft Rate Study in April, 2017, City Council directed staff to “pause” and investigate ways to reduce project costs. This investigation consisted of a peer review workshop and report, followed by an updated site comparison study to explore the most cost-effective approach to move forward. The investigations and subsequent decisions by City Council resulted in changes to the project scope to reduce cost while still meeting the primary project objectives of plant relocation and recycled water production.

The City Council elected to move forward with planning for a WRF Project that will provide full water recycling at the South Bay Boulevard site, which was the site evaluated in the draft Water Reclamation Facility Master Plan and Master Water Reclamation Plan. Based on recommendations in the Master Water Reclamation Plan, it is anticipated that the Project will

include full advanced treatment, a recycled water pipeline, and injection wells to facilitate indirect potable reuse.

Current Schedule: The anticipated schedule for significant milestones and Council decisions is summarized below.

<i>Item</i>	<i>Date</i>
<i>Release RFQ for Design/Construction of WRF Onsite Improvements</i>	<i>Released October 2017</i>
<i>Council Selection and Award for WRF Offsite Improvements design (Lift Station and Pipelines)</i>	<i>November 2017</i>
<i>Release RFP for Design/Construction of WRF Onsite Improvements</i>	<i>January 2018</i>
<i>Release of Public Draft Environmental Impact Report (Draft EIR)</i>	<i>March 2018</i>
<i>Release of Updated Rate Study</i>	<i>April/May 2018</i>
<i>Proposition 218 Hearing</i>	<i>May/June 2018</i>
<i>Certification of Final EIR (Critical Timeline for Grant Pursuits)</i>	<i>June 2018</i>
<i>Award of Contract for WRF Onsite Improvements</i>	<i>August 2018</i>
<i>Award of Contract for Construction of Lift Station and Offsite Pipelines</i>	<i>November 2019</i>
<i>Completion of WRF Improvements</i>	<i>No Later than December 2022</i>

Morro Bay and Cayucos Sanitary District have decided to end their joint wastewater relationship. Each agency will construct new wastewater treatment facilities and apply for new, separate discharge permits.

The Central Coast Water Board staff, Executive Officer, and Board chair have been working with both Morro Bay staff and city council members to encourage the City towards committing to maximizing recycling in the forthcoming new facility and to ensure this new wastewater facility is completed in a timely manner.

Changes from the Existing Order

The proposed Order is structured in accordance with the statewide NPDES permit template.

Changes in the proposed Order from the existing Order include:

1. Discharge Prohibitions have been updated (Order Section II, pages 4-5)
2. Effluent limitations for biochemical oxygen demand and total suspended solids have been revised to eliminate the previous 301(h) waiver (page 5)
3. Added Section V.C.2.a, Toxicity Reduction Requirements if the facility detects chronic toxicity above the applicable effluent limitation (page 13)
4. Added Section V.C.3.b, Pollutant Minimization Program section, consistent with California Water Code requirements (page 16-17)
5. Biosolids Section V.C.5.a has minor updates consistent with State Board template (page 18)
6. Added Section V.C.6.a Statewide General Waste Discharge Requirements for Sanitary Sewer Systems added consistent with State Board template (page 19)

7. Added Section V.C.6.b Loss of Disinfection section consistent with recent Orders adopted by the Central Coast Water Board (page 19)
8. Effluent limits for ammonia, copper, lead, selenium, and zinc were removed consistent with the results of the reasonable potential analysis (page F-31)
9. Monitoring for Ocean Plan Table 1 metals and non-metals for protection of marine aquatic life without reasonable potential was established as once per year. This reduces the monitoring frequency from semiannual to annual. (page F-39)
10. Monitoring of the parameters for protection of human health without reasonable potential was established as once per permit term. This is consistent with other ocean discharge permits within the region. (page F-39)
11. Because ammonia did not demonstrate reasonable potential to exceed water quality objectives, the monitoring for ammonia was reduced from monthly to annually. Because the data is not necessary to evaluate compliance with applicable water quality objectives, monitoring for nitrate, urea, orthophosphate, and dissolved silica was reduced from semiannual to annual. (page F-39)
12. Since the time of the original cat-litter public outreach program, the Central Coast Water Board has shifted similar programs to NPDES stormwater programs, when the programs are deemed necessary. Consistent with this practice for other areas in the Central Coast region, the cat-litter program has been removed from this permit, and the stormwater program would be the appropriate regulatory program, if deemed necessary.
13. After reviewing the existing Order's permitting history with regards to acute toxicity testing requirements, Water Board staff agreed with the Discharger's request to remove the acute toxicity monitoring requirement. Chronic toxicity testing is a more sensitive and accurate measure of whole effluent toxicity than acute toxicity. In this case, with an initial dilution of 133:1, chronic toxicity testing provides adequate protection of beneficial uses.
14. Reduced monitoring frequencies for cyanide and TCDD equivalents. The most recent data and reasonable potential analysis support these changes.
15. Reduced requirements for offshore benthic surveys and eliminated the requirement for water-column surveys. Water Board staff agrees with the Discharger's that the comprehensive data set gathered during the previous Orders' offshore monitoring programs do not indicate an impact from the discharge on the marine environment. Also, the intensive monitoring is no longer required as the Discharger moves from the 301(h)-modified permit.
16. Additional minor modifications in response to the Discharger's comments on the draft permit. See below and pages F-41 through F-47.

Compliance History

The Discharger has a good history of compliance and addressing discharge violations promptly when they have occurred. Four effluent limitation violations were reported from July 2009 through August 2017; three for elevated chlorine residual and one for total suspended solids.

COMMENTS

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to issue WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided by publication in the local newspaper, posting on the Central Coast Water Board's website, posting at the facility. Written comments were due at the Central Coast Water Board office by 5:00 p.m. on November 6, 2017. One comment letter was received from the Discharger. The Water Board response to comments is provided in the proposed Order's Fact Sheet (pages F-41 through F-47). Water Board staff agreed with most of the Discharger's suggested modifications, which are reflected in the tentative order. Staff did not agree to drop monitoring for nutrients.

RECOMMENDATION

Adopt Order No. R3-2017-0050, as proposed.

ATTACHMENT

For copies, please refer to the Central Coast Water Board's internet website at:

http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2017/2017_agendas.shtml

1. Proposed Order No. R3-2017-0050, including the following associated attachments:
 - Attachment A – Definitions
 - Attachment B – Map
 - Attachment C – Flow Schematic
 - Attachment D – Standard Provisions
 - Attachment E – Monitoring and Reporting Program (MRP)
 - Attachment F – Fact Sheet

2. City of Morro Bay Comment Letter dated November 6, 2017.

CW-241479

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